

### **DETAILED ACTION**

1. This non-final office action is in response to the RCE and amendment filed 17 November 2009.
2. Claims 1-29 are pending. Claims 1, 15, and 16 are independent claims.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Maes et al. (EP 1100013, published 16 May 2001, hereafter Maes) and further in view of Mukherjee (US 6314415, filed 4 November 1998).

As per independent claim 1, Maes discloses a method of generating invocation sequences of update function to update elements of a form, the method comprising the steps of:

supplying update functions to a synthesizer (paragraph 0018)  
identifying trigger elements from the elements of the form in the update functions that trigger the invocation of the update function (paragraphs 0018 and 0022)  
generating an activation network based on the update functions at the synthesizer (paragraphs 0018, 0022, and 0108-0109)

determining the invocation sequence of update functions for each trigger element (paragraphs 0018, 0022, and 0108-0109: Here, upon identifying an update function, the CML interpreter determines the CML function to be invoked to handle the update).

Maes fails to disclose update values associated with a question in a questionnaire form used to obtain information to produce a customized document from a template document, the invocation sequence specifying an order in which the update functions are invoked comprising the step of identifying, using the synthesizer, trigger questions from the questions of the questionnaire that trigger the invocation of at least one supplied update functions. However, Mukherjee discloses update values associated with a question in a questionnaire form used to obtain information to produce a customized document from a template document, the invocation sequence specifying an order in which the update functions are invoked comprising the step of identifying, using the synthesizer, trigger questions from the questions of the questionnaire that trigger the invocation of at least one supplied update functions (Figures 3A-3L; column 2, line 19- column 3, line 5: Here, based upon the user's answers to trigger questions within the questionnaire, various other questions become available/disabled). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Mukherjee with Maes, since it would have allowed a user to specify trigger questions across a plurality of templates displayed to users upon various devices.

As per dependent claim 2, Mukherjee discloses wherein the trigger elements are determined by at least one of the value or status of the elements of the form (Figures

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3A-3L; column 2, line 19- column 3, line 5). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Mukherjee with Maes, since it would have allowed a user to answer questions related to previously validated answers.

As per dependent claim 3, Maes discloses wherein the activation network includes cyclic update functions (paragraph 0018).

As per dependent claim 4, Maes discloses exporting the update functions and the invocation sequence to a form render in a readable format (paragraph 0022: Here, the data is sent to a browser in a mark-up language, so that the data may be rendered and displayed to a user in a readable format).

As per dependent claim 5, Maes discloses wherein the update function are validation function (paragraphs 0061-0064 and 0087).

As per dependent claim 6, Maes discloses wherein the update function are activation functions (paragraphs 0110-0117).

As per dependent claim 7, Maes discloses wherein the synthesizer is stored on a server computer (paragraph 0017).

As per dependent claim 8, Maes discloses wherein the synthesizer is stored on a client computer (paragraph 0017).

As per dependent claim 9, Maes discloses wherein the synthesizer forms part of a middleware application, located between a server computer and a client computer (Figure 5a).

As per dependent claim 10, Maes discloses wherein the synthesizer is integrated with the form renderer (paragraph 0022: Here, the synthesizer is incorporated with a browser, which renders the form data).

As per dependent claim 11, Maes discloses wherein the form render is a web browser application (paragraphs 0018 and 0022).

As per dependent claim 12, Maes discloses wherein the update functions are supplied by one of a database engine and a form renderer (paragraph 0061).

As per dependent claim 13, Mukherjee discloses wherein the step of determining the invocation sequence involves determining the order in which the update functions must be executed within the activation network (Figures 3A-3L; column 2, line 19- column 3, line 5). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Mukherjee with Maes, since it would have allowed a user to enable/disable necessary/unnecessary questions.

As per dependent claim 14, Maes discloses the method further comprising:  
entering data to change the status of a first form element (paragraphs 0022 and 0084: Here, the data may change a default value of a form element)

determining the position of the first form element in the activation network (paragraphs 0022 and 0084)

triggering the update functions associated with the first form element to update the status of a second form element (paragraphs 0022 and 0084: Here, if the default value of 'yes' is changed, the value of a second form element 'travelCenter.hotel.selected' is modified by a user).

As per claim 15, the applicant discloses the limitation substantially similar to those in claim 1. Claim 15 is similarly rejected.

As per claims 16-29, the applicant discloses the limitations substantially similar to those in claims 1-14, respectively. Claims 16-29 are similarly rejected.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KYLE R. STORK whose telephone number is (571)272-4130. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Kyle R Stork/  
Primary Examiner, Art Unit 2178